

## NEW SPECIES AND RECORDS OF TRYPETINAE (DIPTERA: TEPHRITIDAE) FROM AUSTRALIA AND THE SOUTH PACIFIC

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### Abstract

*Calosphenisca ndomae* sp. n. and *Euphranta lemniscoides* sp. n. are described from Solomon Islands. *Euphranta ochrosiae* sp. n. is described from Papua New Guinea. *Aciuroopsis pusio* Hardy and *Euphranta lemniscata* Enderlein are newly recorded from Australia and New Caledonia respectively. Host plant and/or distribution records are noted for a further 23 species, including several new records for Papua New Guinea, Solomon Islands and Vanuatu.

### Introduction

Australian and Pacific Island fruit flies belonging to the subfamily Trypetinae have been studied intermittently in recent years, following revisions published for Australia (Permkam and Hancock 1995) and the Indonesia, Papua New Guinea and Solomon Islands region (Hardy 1983, 1986, 1987). In an earlier review (Hancock and Drew 1994), we concentrated on islands of the south-central Pacific. The present study reports on new and interesting records from Australia and the southwestern Pacific, including the descriptions of three new species from Papua New Guinea and the Solomon Islands.

The following abbreviations for specimen depositories have been used: AQIS – Australian Quarantine & Inspection Service, Mareeba and Broome; QDPI – Queensland Department of Primary Industries, Brisbane; QMB – Queensland Museum, Brisbane; UQIC – University of Queensland Insect Collection, Brisbane. Tribal classification follows Korneyev (1999).

### Systematics

#### Tribe ADRAMINI

#### *Adrama selecta* Walker

*Material examined.* PAPUA NEW GUINEA: 1 ♀, Morobe Province, 10 km W of Lae, nr Markam River, banana plantation, 10-16.vii.1999, Yeates *et al.*, malaise, lowland rainforest (QMB); 1 ♀, Milne Bay Province, Dabora Village, 1.iii.2000, bred from *Gnetum gnemon*, S 875; 4 ♀♀, Madang Province, Ohu, 14.xii.2000, bred from *Barringtonia calyptocalyx*, M 632 (all QDPI).

*Comments.* Some of the above specimens were bred from the fruit of *Barringtonia calyptocalyx* (Lecythidaceae) and there is a single record from *Gnetum gnemon* (Gnetaceae). For other host plants see Hancock *et al.* (2000).

#### *Coelotrypes flavinus* (Hering)

*Material examined.* PAPUA NEW GUINEA: 1 ♀, Western Highlands Province, Kuk, 13.viii.1982, J.W. Ismay, swept sweet potato; 7 ♂♂, 3 ♀♀, Eastern Highlands Province, Aiyura Research Station, staff residential area, 23.ii.1999, 23.iii.1999, 29.ix.1999, 10.xi.1999 & 19.iv.2001, Leon Saleu, ex cue lure and methyl eugenol traps P419 (all QDPI).

*Comments.* Species in genus *Coelotrypes* Bezzi breed in the flower buds of *Ipomoea* spp. (Convolvulaceae) and sweet potato is a likely host.

*Euphranta leichhardtiae* Permkam & Hancock

*Material examined.* AUSTRALIA: 1 ♀, SE Queensland, nr Fresh Water Lake, Coolooloa, 3-13.iii.1970, E.C. Dahms, rainforest, at light (QMB).

*Comments.* The above is an additional locality for this little-known eastern Australian species. It has been bred from the fruit of *Rauwenhoffia leichhardtii* (Annonaceae) (Permkam and Hancock 1995).

*Euphranta lemniscata* Enderlein

*Material examined.* NEW CALEDONIA: 1 ♂, 21°07'S, 164°57'E, 30 m, Tia Reserve, 4-5.xi.2001, G. Monteith, at UV light (QMB).

*Comments.* This widespread species is newly recorded from New Caledonia.

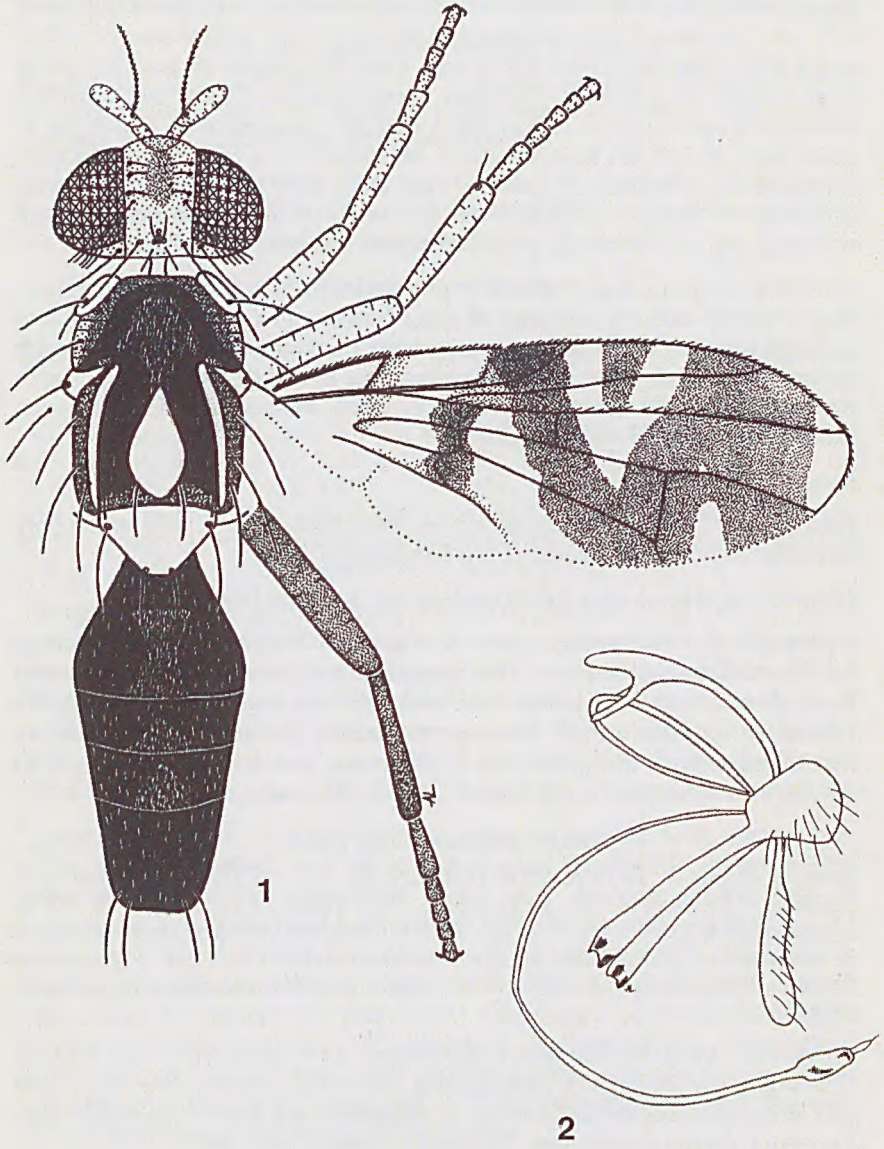
*Euphranta lemniscoides* sp. n.

(Figs 1-2)

*Types.* *Holotype* ♂, SOLOMON ISLANDS: W Guadalcanal, Tangarare, 21.x.1997, F. Tsatsia, hand collected on cut end *Vitex* sp. (in QMB, Reg. No. T 99079). *Paratypes*: 3 ♂♂, Central Guadalcanal, Mt Austen, 20.x.1995, R.G. Hollingsworth *et al.*, SI 1346 (QDPI).

*Description.* Male (Fig. 1). Length of body 8.5 mm; of wing 7.8 mm. Head fulvous, slightly higher than long. Antennae yellow; arista plumose. Face concave, with a greyish sheen but no dark markings. Frons pubescent, with 3 pairs of frontal and 1 pair of orbital setae, the upper frontals aligned with orbitals; on 1 specimen a weaker fourth pair of frontal setae present on line of orbitals, the third pair of frontals shifted anteriorly; ocellar setae weak or vestigial.

Thorax largely black except pleura partly to extensively red-brown and with yellow-white markings as follows: postpronotal lobes; lateral postsutural vittae from suture to enclose intra-alar setae; a large prescutellar elliptical spot narrowing anteriorly to a point towards suture; a broad band on upper half of anepisternum, connected by a narrow extension with postpronotal lobe; katatergite. Notoptera fulvous to red-brown, connected to postpronotal lobes by a lateral band yellow dorsally and brown ventrally. Scutellum yellow; subscutellum and mediotergite black. With a full complement of thoracic setae except presuturals; dorsocentrals placed midway between supra-alars and prescutellar acrostichals; 2 anepisternals; 4 scutellars. One specimen has 2 pairs of postpronotal setae and 3 anepisternal setae, the upper pair close together. Haltere yellow. Legs fulvous except fore and mid tibiae red-brown and hind tibiae tending black; middle tibia with an apical black spine; fore femur slightly swollen and with a row of 4-6 ventral black setae.



Figs 1-2. *Euphranta lemniscoides* sp. n. (1) male; (2) male genitalia.

Wing hyaline with a transverse fulvous subbasal band across base of cell c to base of cell bcu, a dark blackish-brown transverse band from below middle of cell c to apex of cell bcu, connected to pterostigma by yellow base of cell r<sub>1</sub>, and a large blackish-brown apical area from pterostigma to hind margin of wing, leaving apex hyaline (including apices of cells r<sub>2+3</sub> and m<sub>1</sub>), a hyaline indentation posteriorly in cell m and a hyaline V-shaped band from costa to upper part of cell dm between the R-M and DM-Cu crossveins; blackish-brown band in hyaline V reaches vein R<sub>4+5</sub>. Pterostigma blackish-brown except narrowly yellow basally. Veins R<sub>1</sub> and R<sub>4+5</sub> setose; R-M crossvein near middle of cell dm, below apex of pterostigma; cell bcu apically acute.

Abdomen elongate; black except tergite I+II with a quadrate or hourglass-shaped medial marking and terga III and IV each with a posterior triangular to quadrate marking, narrowest anteriorly; these markings fulvous with a greyish sheen. Tergite V elongate, about as long as terga III and IV combined; posterior margin of tergite V varies from yellow to black. Male genitalia (Fig. 2) with proctiger and surstyli very elongate.

Female. Unknown.

*Host plant.* The Mt Austen paratypes were bred from a vine tentatively identified as *Merremia peltata* (Convolvulaceae).

*Distribution.* Known only from Guadalcanal, Solomon Islands.

*Comments.* *E. lemniscoides* is very similar to *E. lemniscata* in wing pattern but the markings are darker and the apical hyaline area is larger in the former. In *E. lemniscoides* the thorax and abdomen are mostly black (generally fulvous to red-brown in *E. lemniscata*) and the proctiger and surstyli are much longer (c.f. *E. lemniscata* in Permkam and Hancock 1995). Both species appear to breed in the fruit of Convolvulaceae.

#### *Euphranta marginata* Hardy

*Material examined.* PAPUA NEW GUINEA: 46 ♂♂, 50 ♀♀, Madang Province, Baitabag, 24.v.2000, 4, 11 & 25.x.2000, 15.xi.2000, 30.v.2001, 6, 13, 20 & 27.vi.2001, 4 & 25.vii.2001, 11 & 22.viii.2001, bred from *Neuburgia corynocarpa*; 1 ♀, same data except 25.vii.2001, ex *Ochrosia coccinea*, M 1769; 8 ♂♂, 8 ♀♀, Madang Province, Ohu, 4.x.2000, 8.ii.2001 & 21.vi.2001, bred from *Neuburgia corynocarpa* (all QDPI).

*Comments.* Most of the above specimens were bred from the fruit of *Neuburgia corynocarpa* (Loganiaceae); the single record from *Ochrosia coccinea* (Apocynaceae) is an error. *E. marginata* was known previously only from the holotype female from Morobe Province (Hardy 1983).

#### *Euphranta marina* Permkam & Hancock

*Material examined.* PAPUA NEW GUINEA: 1 ♀, Western Province, Mabaduan [coast N of Saibai I.], 4.iii.1993, R. Stephens, collected on board boat (QDPI).

*Comments.* This coastal Australian species is newly recorded from Papua New Guinea. It breeds in the mangrove *Avicennia marina* (Verbenaceae).

*Euphranta numeralis* Permkam & Hancock

*Material examined.* AUSTRALIA: 1 ♂, SE Queensland, 27°26'S, 152°50'E, Enoggera Creek at Scrub Rd, Brisbane Forest Park, 7-9.i.1993, R. van Klinken, rainforest, bred *Maclura cochinchinensis* [sic] fruit (UQIC).

*Comments.* This species was known previously only from the holotype male from New South Wales (Permkam and Hancock 1995). The above specimen was bred from fruit of *Maclura cochinchinensis* (Moraceae).

*Euphranta ochrosiae* sp. n.

(Figs 3-6)

*Types.* *Holotype* ♂, PAPUA NEW GUINEA: Madang Province, Baitabag, 1.viii.2001, bred from *Ochrosia coccinea*, M 1826 (in QMB, Reg. No. T 99080). *Paratypes*: 2 ♂♂, 4 ♀♀, same data as holotype; 52 ♂♂, 43 ♀♀, same data except 2.viii.2000, M 176b; 28.ii.2001, M 950; 28.iii.2001, M 1106; 25.iv.2001, M 1238; 2 & 9.v.2001, M 1265 & 1291; 3, 20 & 27.vi.2001, M 1507, 1540 & 1591; 4, 11, 19, 25 & 29.vii.2001, M 1623, 1677, 1718, 1728, 1769 & 1777; 1, 8, 15, 22 & 29.viii.2001, M 1809, 1826, 1864, 1884, 1918, 1958, 1980, 1993 & 2021; 31.x.2001, M 2540 & 2549; 3 ♂♂, 3 ♀♀, same data except 5.ix.2001, bred from *Myristica* sp., M 2035 (4 in QMB, Reg. Nos T 99081-99084; others in QDPI).

*Description.* Male (Fig. 3). Length of body 6.8 mm; of wing 6.0 mm. Head fulvous, slightly higher than long. Antennae yellow with third segment fuscous; arista plumose. Face concave, with a greyish sheen but no dark markings. Frons fulvous laterally, red-brown medially, with a black central marking across apical half; pale pubescent; with 2 pairs of frontal and 1 pair of orbital setae, the frontal setae widely separated with the upper pair just before the orbitals; ocellar setae absent. Occiput largely black behind eyes.

Thorax mostly black, with greyish tomentosity on anepisternum, along suture and as a broad medial band on scutum, widest posteriorly; dorsal half of postpronotal lobe and notopleural callus dark fulvous; ventral half of postpronotal lobe brown; a broad, yellow prescutellar marking, bordered by dorsocentral setae. Scutellum yellow with a broad black basal band; subscutellum and mediotergite black. With a full complement of thoracic setae except presuturals and prescutellar acrostichals; dorsocentrals placed midway between supra-alars and scutellum; 2 anepisternals; 4 scutellars. Haltere pale yellowish-white. Legs with fore femur fulvous with a medial brown band, mid and hind femora and all tibiae blackish-brown and tarsi dark fulvous; middle tibia with an apical black spine.

Wing hyaline with a dark blackish-brown transverse band from pterostigma to basal half of cell dm, bordered distally by R-M crossvein, and a large blackish-brown apical area enclosing DM-Cu crossvein and curving inwards posteriorly, leaving apex hyaline (including apices of cells  $r_{2+3}$  and  $m_1$ ), the

two dark areas separated by a hyaline band from cell  $r_1$  at apex of pterostigma to wing margin; cell  $m$  with a weak hyaline indentation posteriorly; cell  $cu_2$  entirely hyaline. Pterostigma blackish-brown. Vein  $R_1$  setose; vein  $R_{4+5}$  with a few setae near base; R-M crossvein placed before middle of cell  $dm$ , below subapical part of pterostigma; cell  $bcu$  apically acute.

Abdomen elongate; black except terga I+II and III with a quadrate red-brown medial area, overlaid with greyish tomentosity. Tergite V a little longer than tergite IV. Male genitalia (Fig. 4) with proctiger and surstyli elongate.

Female. As for male except terga IV-VI laterally fulvous; tergite VI as long as tergite V; oviscape black, as long as terga IV-VI combined; aculeus (Fig. 5) short, with distinct subapical teeth and apical serrations; three spermathecae (Fig. 6) with smooth, oval heads and constricted necks. On the head the frontal setae vary in position from widely separated with the upper pair just before the orbital setae to close together and situated anteriorly.

*Host plant.* Almost all of the type series were bred from the fruit of *Ochrosia coccinea* (Apocynaceae); the record from *Myristica* sp. (Myristicaceae) appears to be a host misidentification.

*Distribution.* Known only from Madang Province, Papua New Guinea.

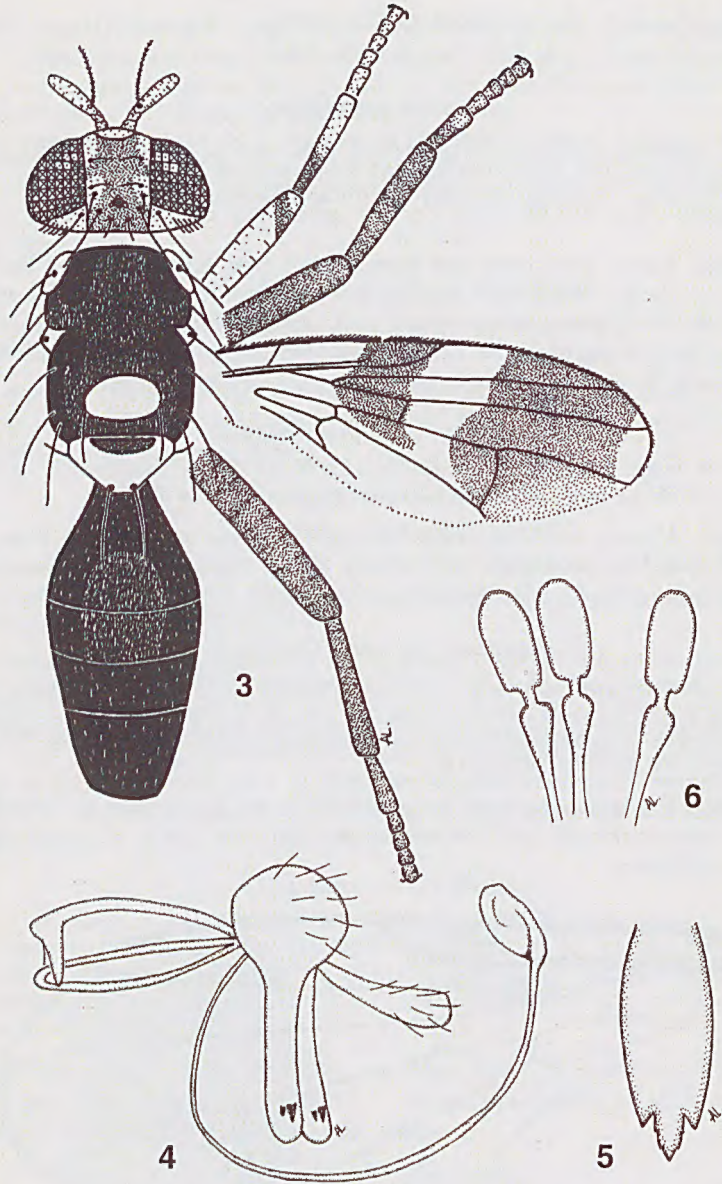
*Comments.* *E. ochrosiae* is similar to *E. vitabilis* Hardy but in *E. ochrosiae* the apical hyaline wing spot is larger, the dark transverse band from the pterostigma is broader (enclosing entire base of cell  $r_{2+3}$ ) and bordered distally by the R-M crossvein (not broadly enclosing it). In addition, the basal margin of the apical brown area is irregularly curved (almost sinuous) in *E. ochrosiae* and evenly curved in *E. vitabilis*.

*Euphranta ochrosiae* belongs to a small group of Apocynaceae-feeding species that includes *E. cerberae* Hancock & Drew from southern Thailand, *E. scutellata* Malloch from Solomon Islands and presumably *E. vitabilis* (host unknown) from the Bismarck Archipelago (and possibly mainland New Guinea – see Hardy 1983).

#### *Euphranta perkinsi* Hardy

*Material examined.* PAPUA NEW GUINEA: 4 ♂♂, 3 ♀♀, Central Province, Laloki Agric. Res. Stn, 7.i.1993, D. Tenakanai, reared from *Faradaya splendida*, F. Muell., L 184; 11 ♂♂, 11 ♀♀, Madang Province, Ohu, 28.vi.2000 & 19.x.2000, bred from *Morinda bracteata*, M 130a & M 446; 1 ♂, Madang Province, Baitabag, 22.viii.2001, bred from *Ochrosia coccinea*, M 1980 [? label error] (all QDPI).

*Comments.* Most of the above specimens were bred from the fruit of *Morinda bracteata* (Rubiaceae). Records from *Faradaya splendida* (Verbenaceae) and *Ochrosia coccinea* (Apocynaceae) appear to be errors; these hosts are used by other species of *Euphranta* Loew. The Baitabag specimen may be a mislabelled specimen from the Ohu series. Host sample M 446 (*M. bracteata*) produced 67 flies.



**Figs 3-6.** *Euphranta ochrosiae* sp. n. (3) male; (4) male genitalia; (5) female aculeus; (6) spermathecae.

*Euphranta perkinsi* was described from West Papua, Indonesia (Hardy 1983) and recorded from Papua New Guinea by Permkam and Hancock (1995).

*Euphranta quatei* Hardy

*Material examined.* PAPUA NEW GUINEA: 1 ♂, 2 ♀♀, Madang Province, Ohu, 24.v.2001 & 4.vii.2001, bred from *Gmelina moluccana*, M 1372 & M 1653; 2 ♂♂, Madang Province, Baitabag, 16.v.2001, bred from *Chionanthus sessiflorum*, M 1323 (all QDPI).

*Comments.* Known previously only from the holotype male from West Papua, Indonesia (Hardy 1983), this species is newly recorded from Papua New Guinea. Its host plant appears to be *Gmelina moluccana* (Verbenaceae), the two samples yielding eight (M 1372) and six (M 1653) flies respectively. The record from *Chionanthus sessiflorum* (Oleaceae) requires confirmation.

*Euphranta scutellata* Malloch

*Material examined.* SOLOMON ISLANDS: 15 ♂♂, 22 ♀♀, NE Guadalcanal, Vovota, 20.i.1995, R. Wylie *et al.*, bred from *Cerbera manghas*, SI 0674 (QDPI).

*Comments.* Known previously only from the holotype and allotype from an unspecified locality (Malloch 1939, Hardy 1983). The above series was bred from the fruit of *Cerbera manghas* (Apocynaceae).

*Euphranta variabilis* (Kertész)

*Material examined.* AUSTRALIA: 1 ♀, N Queensland, 1 km N of 'Eclectus', Iron Range, 12°45'45"S, 143°17'11"E, 12.vii.1977, G. & A. Daniels (UQIC). PAPUA NEW GUINEA: 1 ♂, Morobe Province, Labu-butu area, Markam River, 6.x.1999, S. Balagawi/ S. Sar, cue lure P429 (QDPI).

*Comments.* The above localities are additional to the few previously recorded for this species (Hardy 1983, Permkam and Hancock 1995). The host plant remains unknown.

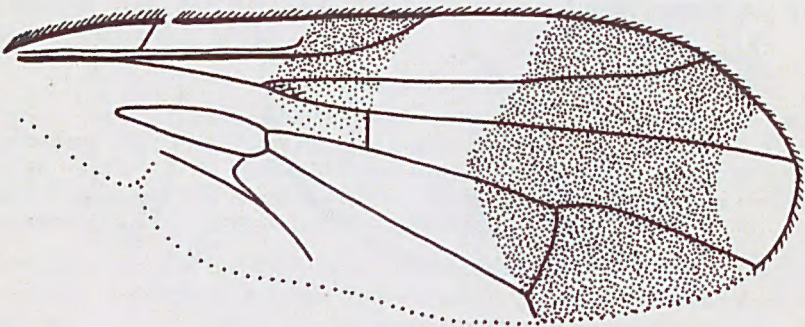


Fig. 7. *Euphranta* sp. indet., wing.



*Euphranta* sp. indet.

(Fig. 7)

*Material examined.* PAPUA NEW GUINEA: 1 ♀, Central Province, Paga Hill, Port Moresby, 16.iv.1967, Sir Alan Mann (QDPI).

*Comments.* This species appears to be related to *E. latifasciata* Hardy but the thorax is entirely orange-yellow, the abdomen red-brown and the basal wing band yellow. The head is missing and the specimen too badly damaged to describe.

*Hardyadrama presignis* (Hardy)

*Material examined.* AUSTRALIA: 1 ♀, Torres Strait, Saibai I., 10.xii.2002, N. Mosby, in ME lure trap (AQIS, Mareeba).

*Comments.* The above is the second record of this species from Australia, being recorded previously from Warraber (Sue) I., also in Torres Strait (Permkam and Hancock 1995).

Tribe HEXACHAETINI

*Callistomyia flavilabris* Hering

*Material examined.* PAPUA NEW GUINEA: 2 ♂♂, 9 ♀♀, Madang Province, Baitabag, 28.vi.2000, bred from *Wenzelia dolichophylla*, M 119; 1 ♀, same data except 13.vi.2001, M 1498 (all QDPI).

*Comments.* Previously recorded from Misool (Maluku Province, Indonesia) and newly recorded from Papua New Guinea. A dark brown facial spot is present or absent and this species differs from *C. pavonina* Bezzi in having the large oval wing spot shallower, not extensive in cell  $r_{2+3}$ . In *C. horni* Hendel this large oval spot is distinctly connected to the transverse band behind it. The above series was bred from the fruit of *Wenzelia dolichophylla* (Rutaceae).

*Callistomyia horni* Hendel

*Material examined.* AUSTRALIA: 1 ♂, Western Australia, Augustus I., 17.iii.2002, A. Postle (AQIS, Broome). PAPUA NEW GUINEA: 1 ♂, 1 ♀, Central Province, 20 km SE Port Moresby, 11.iii.1983 & 26.i.1985, J.W. Ismay; 1 ♂, Burns Peak, Port Moresby, 2.v.1971, J. Pippet (all QDPI); 1 ♂, 1 ♀, Central Province, Hall Sound [near Yule Island], McL. (UQIC).

*Comments.* This species is newly recorded from Western Australia. It is widespread in northern Australia but in Papua New Guinea all known records emanate from Central Province in the south.

Tribe RIVELLIOMIMINI

*Ornithoschema queenslandense* Permkam & Hancock

*Material examined.* AUSTRALIA: 1 ♂, N Queensland, East Claudie River, Iron Range, 1.i.1996, 20 m, G. & A. Daniels (UQIC); 2 ♀♀, N Queensland, 16°40'S, 145°34'E, 10 km NW Ellis Beach, 20.iv.1997, C.J. Burwell (QMB).

*Comments.* The host plant of this endemic Australian species remains unknown.

Tribe TRYPETINI  
*Aciuroopsis pusio* Hardy  
(Fig. 8)

*Material examined.* AUSTRALIA: 1 ♀, N Queensland, Tully, 21.vi.1939, H.J. Turner (QMB).

*Comments.* This distinctive, small black species is newly recorded from Australia, being known previously from the Philippines and Papua New Guinea. It is easily recognised by the wing pattern (Fig. 8) and presence of only 2 scutellar setae, the apical pair lacking. *Aciuroopsis* Hardy was placed in tribe Trypetini by Han (1999). For a description and further illustrations see Hardy (1987). Host plants are unknown.

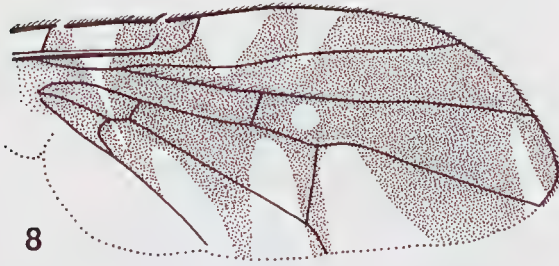
*Calosphenisca ndomae* sp. n.  
(Fig. 9)

*Type.* *Holotype* ♀, SOLOMON ISLANDS: NW Guadalcanal, Ndoma, 13.v.1997, R. Hollingsworth, bred ex *Polygata paniculata*, SI 2063 (in QMB, Reg. No. T 99078).

*Description.* Female (Fig. 9). Length of body (excluding oviscapae) 4.6 mm; of wing 4.5 mm. Head higher than long, fulvous except face with greyish sheen and upper occiput red-brown. Antennae yellow; third segment abraded. Frons with a black circular mark medially; 3 pairs of frontal setae and 2 pairs of black orbital setae; ocellars abraded. Postocular row of setae black and thin; genal seta well developed.

Thorax blackish-brown; anepisternum broadly white; scutellum white. Postpronotal lobes dark fulvous to brown; notopleura brown. With a full complement of black setae; dorsocentrals and prescutellar acrostichals present; 1 strong and 1 weak anepisternal setae; 4 scutellars. Haltere with fulvous stalk and white knob. Legs mostly fulvous; hind tibiae fuscous; mid tibia fuscous basally and with an apical black spine.

Wing hyaline with an extensive brown pattern; cell bc hyaline except very pale brown basally and dark brown at apex; cell c brown with 2 hyaline indentations across it; pterostigma brown; a broad basal brown area curved distally from apex of pterostigma to enclose R-M crossvein, intersected by a narrow hyaline band from basal indentation in cell c to wing margin at apex of vein  $A_1+Cu_2$  and with a small hyaline spot in cell br below pterostigma; alula and anal lobe hyaline; a narrow brown costal band from a little beyond apex of pterostigma to wing apex in cell m; an isolated narrow brown band parallel to edge of basal dark area, from just above vein  $R_{4+5}$  to wing margin in cell m, enclosing DM-Cu crossvein. Veins  $R_1$  and  $R_{4+5}$  setose; R-M crossvein near apex of cell dm, separated from DM-Cu crossvein by about its own length; cell bcu with a narrow and acute apical extension.



Figs 8-9. Trypetini. (8) *Aciuropsis pusio*, wing; (9) *Calosphenisca ndomae* sp. n., female.

Abdomen oval, blackish-brown; tergite VI about as long as tergite V. Oviscape short and conical, as long as tergite VI, 0.4 mm; aculeus not exposed.

*Host plant.* The holotype was bred from the fruit of *Polygala paniculata* (Polygalaceae).

*Distribution.* Known only from Guadalcanal, Solomon Islands.

*Comments.* *C. ndomae* closely resembles *C. bicuneata* (Hardy) from Papua New Guinea. It differs in details of the wing pattern, particularly the costal band, which runs along the costa in cell  $r_1$  in *C. ndomae* and along vein  $R_{2+3}$  in *C. bicuneata*, and the isolated subapical band, which is elongate in *C. ndomae* and short (beginning in cell m well below vein  $R_{4+5}$ ) in *C. bicuneata*. The above host record is the first for the genus.

#### *Calosphenisca unicuneata* (Hardy)

*Comments.* *Fusciludia unicuneata* was transferred to *Calosphenisca* Hendel by Korneyev (1999) and Han (1999), following synonymy of the two genera. This species is widespread in eastern Australia and Papua New Guinea (Permkam and Hancock 1995).

#### *Hemiristina pleomeles* Permkam & Hancock

*Material examined.* SOLOMON ISLANDS: 1 ♀, Guadalcanal, Honiara, 10.viii.1994, R. Wylie *et al.*, bred ex *Diplocyclos palmatus*, SI 0120 (QDPI). VANUATU: 3 ♂♂, 3 ♀♀, Efaté, 27.vii.1995, M. Vagalo, host *Dracaena* sp., V 1434 (QDPI).

*Comments.* Described from Melville and Stephen Islands in northern Australia (Permkam and Hancock 1995), this species is newly recorded from Solomon Islands and Vanuatu. It was bred from *Dracaena* sp. (Agavaceae) in Vanuatu but the above record from *Diplocyclos palmatus* (Cucurbitaceae) in the Solomon Islands is likely to be an error.

#### *Philophylla conjuncta* (de Meijere)

*Material examined.* SOLOMON ISLANDS: 4 ♂♂, 3 ♀♀, NW Guadalcanal, Kodovele, 19.xii.1996, R. Wylie *et al.*, bred from *Premna serratifolia* (L.), SI 0449; 1 ♂, 2 ♀♀, NE Guadalcanal, Vulelua, 29.xii.1994, R. Wylie *et al.*, SI 0541; 27 ♂♂, 25 ♀♀, E Guadalcanal, Adeade, 11.ii.1997, R. Hollingsworth *et al.*, ex *Premna corymbosa*; 6 ♂♂, 4 ♀♀, same data except 6.v.1997, E. Valenga & R. Hollingsworth, SI 2043; 3 ♂♂, 3 ♀♀, Guadalcanal, Tambea, 13.ii.1997, R. Hollingsworth, bred ex *Premna corymbosa*, SI 1971 (all QDPI).

*Comments.* The above specimens were bred from the fruit of *Premna corymbosa* and *Pr. serratifolia* (Verbenaceae). Malloch (1939) also recorded the type series of *P. apicifasciata* (Malloch) [a synonym of *P. conjuncta*] from *Premna integrifolia* [a synonym of *Pr. serratifolia*].

*Philophylla erebia* (Hering)

*Material examined.* AUSTRALIA: 1 ♂, Central Queensland, 25°01'19"S, 147°57'16"E, Carnarvon Nat. Park, Mt Moffatt section Rangers Station, 740 m, 16-18.xi.1995, D. Yeates (UQIC).

*Comments.* The above locality is the first from central Queensland for this species.

*Philophylla fossata* (Fabricius)

*Material examined.* AUSTRALIA: 1 ♂, N Queensland, Iron Range, West Claudie River, 5.xii.1985, D. Yeates, rainforest, at MV light (UQIC); 2 ♀♀, N Queensland, 16°02'S, 145°27'E, Daintree Nat. Park, Cape Tribulation area, malaise in rainforest opening near Emmagen Creek, 2-4.vi.1997, J. & A. Skevington (UQIC); 1 ♀, Central Queensland, 20°06'S, 147°49'E, Finley Creek, E base of Mt Abbott, 13.iv.1997, C.J. Burwell (QMB).

*Comments.* The distribution of this widespread species is extended south from Cairns (Permkam and Hancock 1995) to the Bowen district.

*Philophylla humeralis* (Hendel)

*Material examined.* AUSTRALIA: 1 ♂, 1 ♀, N Queensland, 18°21'S, 146°20'E, Hinchinbrook I., Sunken Reef Bay, 5 m, 20.iv.1999, S.G. Evans, rainforest (QMB).

*Comments.* The only previous Australian record for this species is Dunk Island (Hancock 1995), also in northern Queensland.

*Philophylla quadrata* (Malloch)

*Material examined.* AUSTRALIA: 1 ♂, N Queensland, Iron Range, West Claudie River, 4.xii.1985, D. Yeates, rainforest (UQIC).

*Comments.* The above is the second Queensland record for this species, described originally from the Solomon Islands.

Tribe XARNUTINI

*Xarnuta confusa* Malloch

*Material examined.* AUSTRALIA: 1 ♀, N Queensland, West Claudie River, 4 km SW road junction, 12°44'S, 143°15'E, 26.xi.1986, G. Daniels & M.A. Schneider (UQIC).

*Comments.* Often referred to tribe Acanthonevrini (subfamily Phytalmiinae), *Xarnuta* Walker was placed in subfamily Trypetinae, as currently defined, by Hancock (1986) and Korneyev (1999). *X. confusa* appears to be widespread in northern Queensland.

*Xarnuta cribralis* Hering

*Material examined.* PAPUA NEW GUINEA: 2 ♂♂, 1 ♀, Central Province, Hall Sound [near Yule Island], McL. (UQIC).

*Comments.* The female, previously unknown, is similar in appearance to the male.

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